### I. SOUTHEAST ASIA

- A. Physical Geography: difference between insular (island) and mainland Southeast Asia; island belt is mostly in tropical wet zone; mainland in tropical wetand-dry zone
  - 1. Mainland Environments: rugged uplands with broad lowlands; deltas and large rivers: Mekong,
    - a. Other rivers include: Irrawaddy, Red, Chao Phraya

- 2. Monsoon Climates: mainland Southeast Asia affected by monsoons
- 3. Insular Environments: Indonesia dominated by four main islands—Sumatra, Borneo, Java, and Sulawesi; large expanse of shallow seas—covering the Sunda Shelf; Indonesia has the largest number of islands of any island nation; insular Southeast Asia is geologically unstable—volcanoes, earthquakes; related <a href="mailto:tsunamis">tsunamis</a>
  - a. Singapore is an island just off the tip of the Malay peninsula, it is a small city-state.

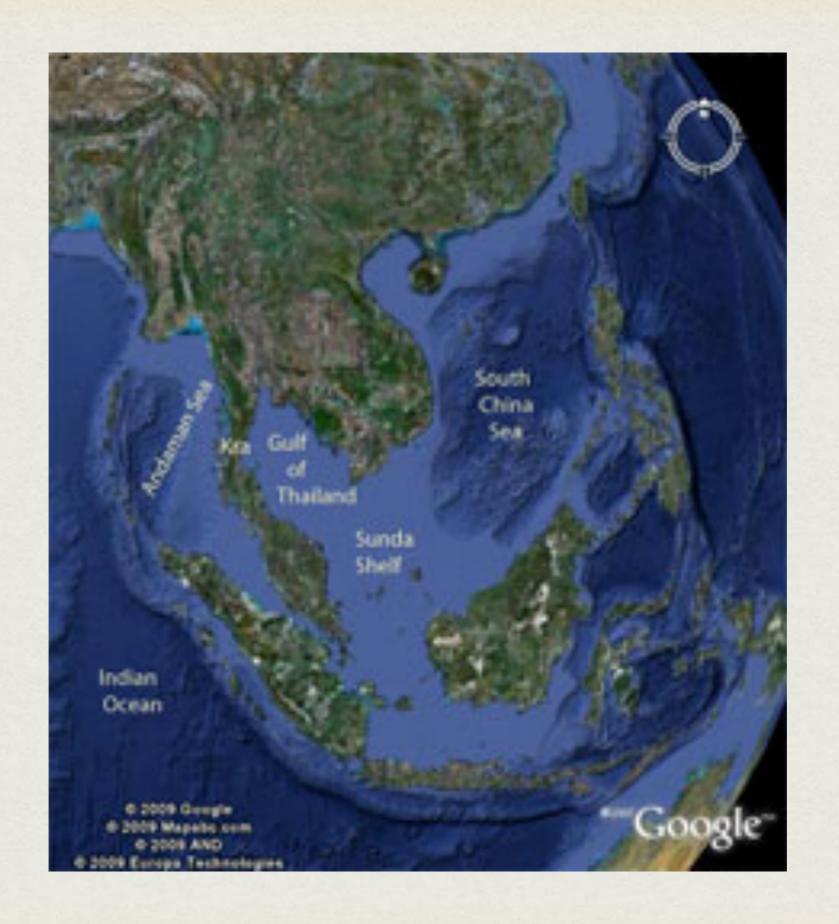
• 4. Island Climates: climates heavily influenced by equatorial location; the Philippines are especially prone to typhoons

#### BALI



# SUNDA SHELF





• B. Climate - There are two major climate types in SE Asia: tropical wet (warm & rains year-round) and tropical wet/dry (rainy season and dry season mainly due to monsoons).

- C. Natural Resources swidden (slash-and-burn) & plantation (one cash crop) agriculture dominate.
  - 1. In both areas, timber is a major resource.
    - a. China's demand for plywood & wood pulp for construction have been driving the industry in recent years.
    - b. Many of these areas are prone to swidden agricultural methods.
- 2. Cash crops, such as palm oil, coffee, pineapples, rubber etc...dominate, plantation agricultural methods are used.

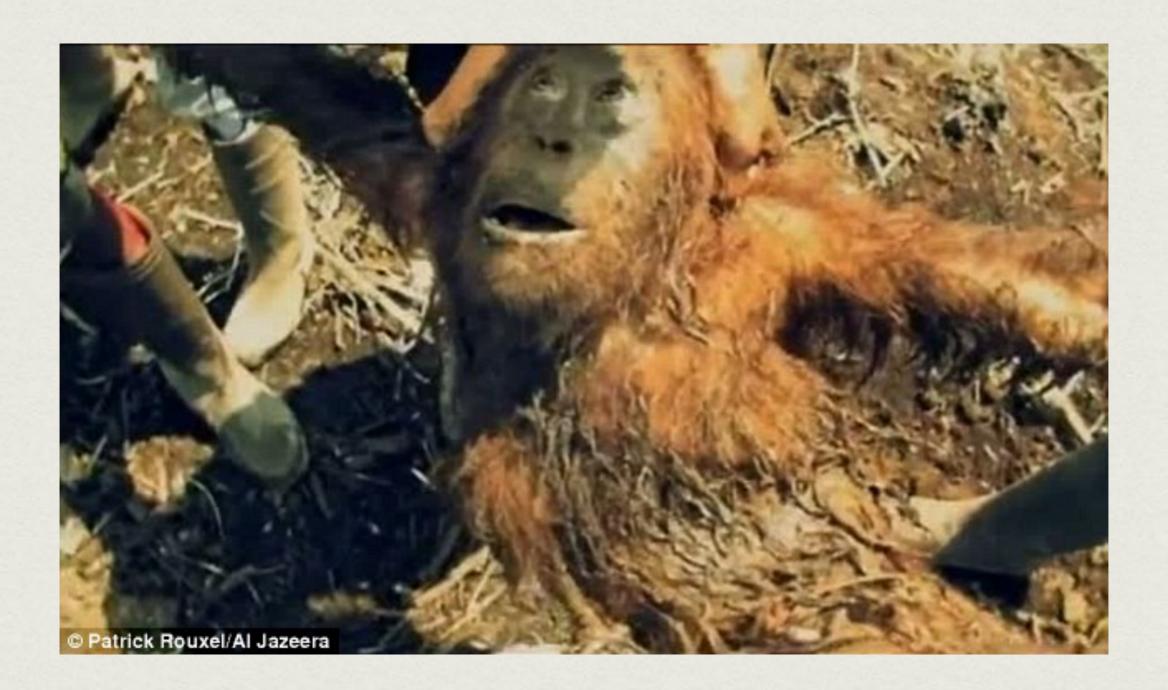
- 3. Rice is the main subsistence crop grown for local food and for export abroad in the coastal lowlands of mainland SE Asia.
- 4. In the "Golden Triangle" in the higher lands of SE Asia on the mainland, opium poppies have become a major source of illegitimate income.

- D. Environmental Issues The deforestation of Southeast Asia: long been major issue throughout region; especially pronounced with international commercial logging in second half of 20th century; China is playing major role; forests have also been cleared for farming; some rainforests replaced with oil palms
  - 1. Local patterns of deforestation
    - a. Malaysia—long time exporter of tropical hardwoods;
    - b. Indonesia—rapid deforestation;
    - c. considerable loss in the Philippines;
    - d. extensive deforestation also on mainland— Thailand, then Burma, Vietnam, Laos, and Cambodia; some areas are returning—Vietnam

2. Protected Areas: Indonesia has created protected areas—conservation helps protect wildlife as well; region is key center in trade of endangered species and animal products—many destined to China

# GREEN THE ORANGUTAN







- E. Fires, Smoke, and Air Pollution: considerable burning associated with land clearance and deforestation (swidden or slash & burn); wildfires contribute to air pollution; efforts to protect air quality hampered by industrial development and increased vehicular use
- F. Energy in Southeast Asia: one of world's first major oil-exporting regions—but all except Brunei are importers; most renewable energy derived from hydropower and geothermal plants; region does not produce nuclear power—although Vietnam, Indonesia, Malaysia, and Thailand in planning stages

# DEFORESTATION - BORNEO

